

**3M General Offices**

3M Center  
St. Paul, Minnesota 55144-1000  
612/733-1110  
Duns No.: 00-617-3082

## **MATERIAL SAFETY DATA SHEET**



**DIVISION: INDUSTRIAL CHEMICAL PRODUCTS DIVISION**

**TRADE NAME:**

**FC-95 FLUORAD® Brand Fluorochemical Surfactant**

**3M I.D. NUMBER:** 98-0207-0103-7    98-0207-0104-5    98-0211-0888-5    98-0211-3916-1

**ISSUED: MARCH 10, 1992**

**SUPERSEDES: MARCH 3, 1992**

DOCUMENT: 10-3796-9

1. INGREDIENT	C.A.S. NO.	PERCENT
POTASSIUM PERFLUOROALKYL SULFONATE ...	2795-39-3	82.0 - 86.0

## **2. PHYSICAL DATA**

BOILING POINT:.....	N/A
VAPOR PRESSURE:.....	N/A
VAPOR DENSITY:.....	N/A
EVAPORATION RATE:.....	N/A
SOLUBILITY IN WATER: .....	slight
SP. GRAVITY:.....	ca. 0.600 Water = 1 (Bulk)
PERCENT VOLATILE: .....	0.00 %
VOLATILE ORGANICS: .....	N/D
VOC LESS H <sub>2</sub> O & EXEMPT SOLVENT	N/D
pH: .....	7.00-8.00 (0.1% Aqueous)
VISCOSITY: .....	N/D
MELTING POINT:.....	N/D
APPEARANCE AND ODOR: .....	Light colored, free flowing powdery

### **3. FIRE AND EXPLOSION HAZARD DATA**

**FLASH POINT:** ..... None  
**FLAMMABLE LIMITS - LEL:** ..... N/A  
**FLAMMABLE LIMITS - UEL:** ..... N/A  
**AUTOIGNITION TEMPERATURE:** ... N/D

## **EXTINGUISHING MEDIA:**

### **Water, Foam, CO<sub>2</sub>, Dry Chemical**

**SPECIAL FIRE FIGHTING PROCEDURES:**  
Self-contained breathing apparatus and full encapsulated suit  
impermeable to HF

#### **UNUSUAL FIRE AND EXPLOSION HAZARDS.**

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Toxic by-products, including HF, may be formed

**NFPA-HAZARD-CODES:** HEALTH 4 FIRE 0 REACTIVITY 0  
**UNUSUAL REACTION HAZARD:** none

## **6. REACTIVITY DATA**

**STABILITY:** Stable

#### **INCOMPATIBILITY - MATERIALS TO AVOID:**

Not Applicable

**HAZARDOUS POLYMERIZATION: Will Not Occur**

## **HAZARDOUS DECOMPOSITION PRODUCTS:**

**Thermal decomposition may produce toxic materials including HF.**

**Abbreviations:** N/D - Not Determined N/A - Not Applicable

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**5. ENVIRONMENTAL INFORMATION**

**SPILL RESPONSE:**

Observe precautions from other sections. Use toxic dust mask. Use wet sweeping compound, or water to avoid dusting. Place in a closed container. Clean up residue with water.

**RECOMMENDED DISPOSAL:**

Discharge spent solutions to a wastewater treatment system. Disposal alternative: Mix with flammable material and incinerate in an industrial or commercial incinerator. Combustion products will include HF. Or: Dispose of waste product in a facility permitted to accept chemical wastes. Since regulations vary, consult applicable regulations or authorities before disposal. U.S. EPA Hazardous Waste No.: None

**ENVIRONMENTAL DATA:**

96-Hr. Aquatic Fish LC50, Fathead Minnow(*Pimephales promelas*)=38 mg/l, Bluegill Sunfish(*Lepomis macrochirus*)=68 mg/l, Rainbow Trout(*Salmo gairdneri*)=11 mg/l; 48-Hr. EC50, Daphnia Magna = 50 mg/l; COD=.004 g/g; BOD20 = Nil.

**SARA HAZARD CLASS:**

FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: Yes CHRONIC: Yes

**6. SUGGESTED FIRST AID**

**EYE CONTACT:**

Immediately flush with plenty of water. Continue for 10 minutes. Call a physician.

**SKIN CONTACT:**

Wash affected area with soap and water.

**INHALATION:**

If symptoms occur, remove person to fresh air. If symptoms continue, call a physician.

**IF SWALLOWED:**

Give two glasses of water. IMMEDIATELY call a physician or Poison Control Center.

**7. PRECAUTIONARY INFORMATION**

**EYE PROTECTION:**  
Safety Goggles

**SKIN PROTECTION:**  
Rubber gloves, protective clothing.

**VENTILATION PROTECTION:**  
Local exhaust ventilation should be used to control airborne dust.

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**7. PRECAUTIONARY INFORMATION (continued)**

**RESPIRATORY PROTECTION:**

Toxic dust or supplied air respirator if dust is not well controlled.

**PREVENTION OF ACCIDENTAL INGESTION:**

Not determined.

**RECOMMENDED STORAGE:**

Not determined.

**FIRE AND EXPLOSION AVOIDANCE:**

Not determined.

**OTHER PRECAUTIONARY INFORMATION:**

Use only in well ventilated areas with sufficient air movement to maintain airborne levels at recognized health and safety levels. Do not breathe dust. Avoid contact with eyes and skin; wear protective gear where contact may occur. Do not take internally. Wash hands thoroughly before eating food. Prevent moisture contamination to keep powder free flowing. Launder clothing before re-use.

**EXPOSURE LIMITS**

INGREDIENTS	VALUE	UNIT	TYPE	AUTH	SKIN*	
POTASSIUM PERFLUOROALKYL SULFONATE	...	0.1	mg/m <sup>3</sup>	TWA	3M	Y
POTASSIUM PERFLUOROALKYL SULFONATE	...	0.1	mg/m <sup>3</sup>	TWA	3M	Y
POTASSIUM PERFLUOROALKYL SULFONATE	...	0.1	mg/m <sup>3</sup>	TWA	3M	Y
POTASSIUM PERFLUOROALKYL SULFONATE	...	0.1	mg/m <sup>3</sup>	TWA	3M	Y
POTASSIUM PERFLUOROALKYL SULFONATE	...	0.1	mg/m <sup>3</sup>	TWA	3M	Y

\* SKIN NOTATION: Listed substances indicated with "Y" under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

**SOURCE OF EXPOSURE LIMIT DATA:**

- 3M: 3M Medical Department Guideline

**8. HEALTH HAZARD DATA**

**EYE CONTACT:**

May cause irritation of eyes on direct contact.

**SKIN CONTACT:**

May be absorbed through the skin. Not expected to be irritating to the skin during normal intended use and handling.

**INHALATION:**

Moderately toxic by inhalation. May be irritating to the respiratory system.

**IF SWALLOWED:**

Moderately toxic upon ingestion. The acute oral LD<sub>50</sub> (rat)

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8. HEALTH HAZARD DATA

(continued)

is 251 milligrams/kilogram of body weight. Not teratogenic at 5 milligrams/kilogram of body weight/day (rat). Non-mutagenic in Ames Assay.

SECTION CHANGE DATES

INGREDIENTS	SECTION CHANGED SINCE MARCH 3, 1992 ISSUE
PRECAUT. INFO.	SECTION CHANGED SINCE MARCH 3, 1992 ISSUE

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The information on this Data Sheet represents our current data and best opinion as to the proper use in handling of this material under normal conditions. Any use of the material which is not in conformance with this Data Sheet or which involves using the material in combination with any other material or any other process is the responsibility of the user.